

# White Paper Report

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## **Introduction**

The University of South Carolina, Columbia, South Carolina, received a Level 2 Digital Humanities Start-Up grant to develop the serious game, “Desperate Fishwives,” as a vehicle for teaching early modern British social history. The game was the invention of Dr. Ruth McClelland-Nugent of Augusta State University, Augusta, Georgia, who was a consultant on this grant. Co-PIs Dr. Duncan Buell (computer science) and Dr. Heidi Rae Cooley (media arts, film and media studies) supervised graduate students Grace Hagood (composition and rhetoric) and John Hodgson (computer science) in the development of the game.

### ***Desperate Fishwives***

“Desperate Fishwives” (DF) is set in the fictional 17<sup>th</sup> century English village of Trevale, somewhere in the southwest of England. Nine player characters from various social and economic backgrounds populate the game world, as well as a number of non-player characters (NPCs). Basic game play requires the players to interact, as they might have interacted in the 17<sup>th</sup> century, so as to respond to a randomly assigned Big Problem that confronts the villagers and threatens village life. Players have the game currencies of information, reputation, and commodities, and these are expended in social rituals that serve to unite (or reunite) the community. If a win state is achieved, order and harmony are restored; otherwise, an outside authority, such as a magistrate, arrives on scene to address the Big Problem.

DF was developed using Unity, a game development tool that is available as a free download from Unity 3d ([unity.com](http://unity.com)). Games developed in Unity can be run either standalone on Windows or Mac platforms or through a browser; there is no need for licensing. Programming for Unity is done in JavaScript and/or C#; most of the DF code was done in JavaScript. DF has been developed as a multiplayer game suitable for classroom use in a computer lab, with as many as nine students playing simultaneously, one for each of the player characters. Play begins with the players/villagers being confronted with a Big Problem that must be solved during a simulated three “days” period. The original plan called for an intervening “night period” in which the game would be paused to permit the students (and, presumably, the instructor) to discuss the previous day’s play and the plans for the next “day” of game play. After some testing of the game in play, it was felt that the night period would not enhance the educational mission and that discussion following a complete game would serve as a better method for students to understand the game play as it relates to the history lessons.

The three resources that players can acquire (information, goods, and reputation) can be increased through the playing of minigames. Success in the information minigame, for example, requires a player to communicate with NPCs in a game of matching and timing, and to do so in a manner appropriate to the social status of the player and the NPCs. The intent of this minigame is to simulate

conversation between characters of differing socio-economic classes. In a similar vein, the goods minigame simulates commerce and illustrates the varying economic situations in the village. Finally, the reputation minigame, modeled after Mine Sweeper, asks players to move selectively across a field of squares, avoiding triggering social degradation by mis-stepping on a concealed bomb. In order to confront the Big Problem and thus win the game, the players must cooperatively complete four social rituals, such as a church ale, a football match, or a day of prayer and fasting. Each ritual requires the use of resources; each has a chance of failure; and a different subset of seven rituals applies to each Big Problem (from a complete list of 21 such rituals). If time runs out prior to the successful completion of four such rituals, the players are taken to a courtroom scene where they appear before the magistrate. Failing to complete the four social rituals means that the primary goal of the game will not have been achieved, but in a final minigame, a lesser win can be obtained. This final minigame requires the players to be consistent in their “recitation of the facts” before the magistrate. The lesser win is attained only if the players can be consistent in their recitations with the recitations of earlier players.

DF is a cooperative game that emphasizes the interconnectivity of all people in the town. The magistrate’s judgment on the town is a judgment about all the people as a social unit, not simply about the players or their lack of skillful play.

At an initial level, DF as a game was completed by Mr. John Hodgson, for whom the project served as his thesis for the M.S. degree in the Department of Computer Science and Engineering in May 2012.

### **Play Testing**

On April 9, 2012, the PIs and the graduate students traveled to Augusta State University to play-test the game in Dr. McClelland-Nugent’s advanced undergraduate history class. The class met for this purpose in a computer lab; the game itself was brought as a standalone program on ten flash memory drives and ran without an installation requirement. Students were grouped two or three to a computer. The testing of this version of the game was done in single-player mode, because it was felt that the infrastructure requirements for networking the lab for use in a single one-hour demo was not worth the effort or the risk of failure.

In response to the play-testing, Dr. McClelland-Nugent required students to submit evaluative responses. These were fairly predictable but also very valuable. As expected, we received a few responses of the “this is totally lame and worthless” nature. Other than those few, responses suggested relatively minor changes to the game that would enhance its appeal. Students found the virtual game space too large and the opportunities for interactions too few. Students found a bug in the code that permitted the players to walk on the water

and on the tops of buildings. Several students felt that there needed to be more tutorial and instruction. Students were a little disappointed that the art assets were not better than they were. This was one of the failings of the spring semester work; we found it very hard to get good art assets. Additionally, it became apparent that the buildings were too similar and naïve players were not sure where they were in the village.

In general, the comments from play-testing were constructive and reasonable, and Mr. Hodgson was able to incorporate most of them in the final version of the game before finishing his thesis. Some of the observations from watching the students cannot appear in the student responses. The students were generally very positive about the text and dialogue in the game, and we watched one team play the game with one of the three students actually performing aloud the text of the game. We considered this level of engagement a sign of success.

### **Media Publicity**

“Desperate Fishwives” received very favorable media attention. The *Free Times* of Columbia, the largest weekly newspaper in the state, featured the game in an issue in fall 2011 [http://www.free-times.com/index.php?cat=1992912064025693&ShowArticle\\_ID=11012709110837472](http://www.free-times.com/index.php?cat=1992912064025693&ShowArticle_ID=11012709110837472) and the game was featured in in the University of South Carolina alumni magazine for Winter 2011-2012.

### **Successes, Failures, and Further Work**

DF was in development during Fall 2011 as the PIs team-taught a “Gaming the Humanities” class in Fall 2011. This class was actually a combination of four classes, two in humanities and two in computer science, in both cases one at the upper undergraduate and one at the graduate level. As that class and the DF development progressed through the semester, it became clear to the PIs that “game” was a term that carried too much baggage and was misunderstood much too often. The humanities students were at times overly optimistic about the level of effort that goes into producing the kind of computer game they might be used to playing, which led to unreasonable expectations. And unfortunately, some of the computer science students, in contrast, were expecting to be writing first-person-shooter games (perhaps out of ignorance of what was meant by “humanities” in the course title). Although an eventual understanding was reached, this did not happen without some significant discussion with the students.

A further problem was that one of the targeted example “games” for the Fall 2011 class was to bring to mobile devices the historical information on South Carolina College (the earlier name of the University of South Carolina) and its relationship to slavery in the years before the Civil War. The problem in presenting some of the sensitive and controversial topics with which the humanities are concerned

was perhaps best summed up in Dr. Weyeneth's statement, "You can't make a game out of slavery."

We have come to believe that to change the discussion we must first change the language in which the discussion is conducted. Dr. Cooley coined the term "critical interactive" to characterize the kind of projects in which we are now engaged. Critical interactives will employ ludic methods to invite a participatory experience that might elicit empathy, but they will not be "games" per se. Although we feel the *Desperate Fishwives* game has been successful, and that it could be continued and expanded, we also believe that the artificial straitjacketing of a message in the humanities into a "game" context can also detract from the ability of the software artifact to communicate with (and not just "to") participants. This became clear in part from our experience with Dr. Weyeneth's scholarship on slavery and also from our discussions with students in the Fall 2011 class. Although the history students from Augusta State who play-tested *Desperate Fishwives* were quite nice in their comments about DF as a game, it is clear that the "chocolate covered broccoli" complication exists—and it proved in fact a challenge during the development of DF to sketch out minigames that would both function as games and also relate to the social history behind DF as a game. We also have to comment on the difficulty of producing, with usual academic resources, a "game" that will compete in features and impact with a commercially produced game.

We believe that by stepping back from the somewhat artificial requirement that even a "serious game" still be viewable as a game (this requires that there be an element of "fun") we can concentrate on ludic methods that will engage participants, inspire a sense of presence of a predominately unacknowledged history, and evoke an empathic relation to the past. In doing so, we seek to communicate difficult concepts without being either pedantic as an educational tool or disrespectful as a "game". These arguments are presented at greater length in both the GLS and the STS papers that were included with the interim report.

We have engaged in substantial discussions about the nature of serious games, their ability to have an impact in the humanities, and whether competing in the "gaming" world is in fact an effective way to communicate the message in the humanities. Part of our transition to critical interactives has been to present the message directly, rather than in a contrived way. Many "games" that are played on computers include some number of "mini-games" as part of the play. It proved difficult for us to create appropriate mini-games for DF that were not just playable as games but also bore some semantic resemblance to the message being conveyed. One of the mini-games, for example, attempted to convey a sense of the interactions between classes of people in their mode of speaking. Another was intended to demonstrate the need for the village people to be consistent and

coherent in their interactions with the authority figure of the magistrate. Although the play-testing at Augusta State seemed to suggest that the students understood that the mini-games were not just games, there was nonetheless some sense of contrivance. In departing completely from the need to be a “game,” we can be much more direct in our presentation of the delicate material regarding slavery in South Carolina.

## **Bibliography**

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